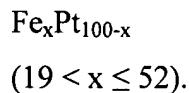


AMENDMENTS TO THE CLAIMS

1 to 8. (Canceled)

9. (New) An FePt magnetic thin film having an atomic composition represented by the following Formula:



10. (New) The FePt magnetic thin film according to Claim 9, having a thickness of less than 100 nm and an L1₀ structure.

11. (New) The FePt magnetic thin film according to Claim 9, being formed on a single crystalline substrate or on an oxide undercoat layer formed on the surface thereof.

12. (New) The FePt magnetic thin film according to Claim 11, being formed via a thin layer of one or more of transition and noble metals formed as an undercoat layer.

13. (New) The FePt magnetic thin film according to Claim 12, wherein the thin layer is a single layer or multiple layers.

14. (New) The FePt magnetic thin film according to Claim 13, wherein the thin layer has a layer of one or more of Fe, Ag, Ni, Co and Cr and a layer of one or more of Au, Pt, and Cu.

15. (New) A method of producing the FePt magnetic thin film according to claim 9, characterized by forming the FePt magnetic thin film by sputtering on a single crystalline substrate, a substrate having an oxide undercoat layer formed thereon, or a substrate having a thin layer of one or more of transition and noble metals as undercoat layer at a temperature in the range of 240°C to 500°C.

16. (New) The method of producing the FePt magnetic thin film according to Claim 15, wherein the FePt magnetic thin film is formed by sputtering at a temperature of 300°C or lower.